

Spectrum RX I FT-IR System



Introduction

If you work in a busy laboratory and need an affordable, rugged FT-IR system which copes easily with the everyday challenges of routine applications, you should choose our Spectrum™ RX I system. Ideal for QA/QC and educational environments, it is fast, accurate, reliable and offers the only genuinely integrated, preconfigured solution to get you up and running fast. The Spectrum RX I system features proven technology and design to give you dependable results, day in, day out. When you choose a Spectrum RX I system, you simply can't go wrong.

A hard-working system that always performs at its peak

The Spectrum RX I system is designed to work at its best under

the toughest laboratory conditions. A spill resistant spectroscopic and QWERTY keypad shields the system from sample damage. The rugged interferometer and optics are isolated from any external vibration.

Fully integrated, the system has a dedicated processor which communicates with current PCs. Spectra are displayed in color, and can be easily manipulated from the keypad. No PC is required because the software is built into the system. However, for extra flexibility, every system comes with fully integrated hard disc drive for easy data transfer to PC. You can control the RX I system from a PC running Spectrum software.

Key Features

- ▶ Fully integrated and ready to go from day one
- ▶ Proven technology ensures accurate, reliable results
- ▶ Industry-standard patented COMPARE™ algorithm for rigorous materials checking

Proven technology for extra confidence

Our patented Dynascan™ interferometer is already used by thousands of laboratory installations around the world. Its patented design is immune to dynamic alignment errors and is also both extremely stable and reliable. With such robust technology built into our system, you can be sure that your Spectrum RX I spectrometer will always give you accurate results.

Industry-standard method for materials checking

Designed by our top scientists, the patented COMPARE™ algorithm has become the industry-standard method for materials checking in quality assurance testing. COMPARE recognizes and accentuates the smallest spectral differences between a sample and a library of reference materials. Unique filters diminish any anomalies such as baseline variations or atmospheric absorption, to focus only on information that is relevant and unique to the sample.

Robust and reliable

- Vibration-isolated optical bench protects the optics from disturbance by other equipment and allows the keypad to be operated during scanning.
- Spill-resistant keypad with single-keystroke operation allows easier data handling and cuts training time.

- Patented Dynascan interferometer provides immunity to dynamic alignment errors.
- Sealed and desiccated optics protect moisture-sensitive components and reduce the effect of change in atmospheric absorption.
- Minimum one-year warranty with optional service contract plans and full IQ and OQ from a qualified engineer.

Fully integrated

- All data and spectra are displayed in color with a custom palette.
- Fully integrated hard disc drive for easy data transfer to PC.
- On-line help makes testing a quick and simple process cutting time and money needed for training.
- Multi-tasking software allows scanning, plotting and data manipulation at the same time increasing the throughput of samples.

Simple operation

- Interactive commands allow spectra to be corrected, subtracted and baseline-adjusted easily.
- Compatibility with Paragon™ and Model 1600 spectrometers allows data and methods produced on those systems to be transferred without change.
- System diagnostics and status indicators ensure reliable results.
- Patented COMPARE function designed for QA vastly reduces the risk of errors due to operator error.
- Simple quantitative capabilities such as peak height and peak area are standard with the system.

Easy sampling and optimum performance

- Optimized, fixed alignment accessories and set-up files allow rapid and simple switching between sample techniques.
- Better than 0.8 cm⁻¹ spectral resolution to isolate sharp absorbance bands.
- OPD velocity variable between 0.1 and 1.5 cm/s to deliver optimum performance for photoacoustic and other detectors.

Every Spectrum system is tested to ensure that it exceeds its published performance figures. Our published specification is the very least you can expect from our system. And we can prove just how exceptional our systems are with IQ and OQ testing to make sure your Spectrum RX I lives up to the standards you have set for your laboratory.



Figure 1. Spectrum RX I with single reflectance ATR.

PerkinElmer, Inc.
940 Winter Street
Waltham, MA 02451 USA
Phone: (800) 762-4000 or
(+1) 203-925-4602
www.perkinelmer.com

For a complete listing of our global offices, visit www.perkinelmer.com/lasoffices

©2008 PerkinElmer, Inc. All rights reserved. The PerkinElmer logo and design are registered trademarks of PerkinElmer, Inc. COMPARE, Dynascan, Paragon and Spectrum are trademarks of PerkinElmer, Inc. or its subsidiaries, in the United States and other countries. All other trademarks not owned by PerkinElmer, Inc. or its subsidiaries that are depicted herein are the property of their respective owners. PerkinElmer reserves the right to change this document at any time without notice and disclaims liability for editorial, pictorial or typographical errors.